

Cumulative Activities In or Near the Project Area

Introduction

Cumulative effects, are those environmental consequences that result from the incremental effects of an activity when added to other past, present, and reasonably foreseeable future actions regardless of which agency, person, or other entity undertakes them (see CFR 1508.7). The analysis and disclosure of cumulative effects provides the decision-maker and the public the context in which the effects are occurring, and the environmental implications of the interactions of known and expected management activities. Most of these activities would be disclosed in more site-specific environmental documents. During subsequent analyses of these site-specific activities, local cumulative effects would be assessed in detail.

The cumulative effects section will help to ensure that the incremental and interactive effects of past, present, and reasonably foreseeable future actions for the Project Area and surrounding area would not negatively affect the natural and other resources in the adjacent landscape. The cumulative effects analysis in this chapter analyzes how planned or reasonably foreseeable activities would affect or be affected by those activities proposed for implementation under the action alternatives. The cumulative effects analysis is conducted for each individual resource. Cumulative effects are often difficult to analyze, considering the broad geographic landscape, the socioeconomic and political policy changes that often occur over time, and the uncertainties associated with government and private actions.

Area of Cumulative Effects Analysis

The cumulative effects analysis for the Ely Westside Rangeland Project area considers past, present, and future activities within the Ely Ranger District, and in some cases lands immediately adjacent to the Project Area, although the actual area of analysis may vary by resource. This would include privately held lands, BLM lands, and National Forest System lands. The cumulative effects analysis areas are identified in Chapter 3 in the Environmental Consequences section of each resource.

Historical Context

Many activities have occurred both historically and currently in the Ely Ranger District that have affected, and continue to affect, the ecological resources of the area. These human caused impacts were primarily due to the historic settlement of the area and included livestock grazing, mining, logging, and recreation. These activities contributed to changes in the natural resources of the area and resulted in long-term degradation of aquatic, riparian, and upland habitats.

Livestock Grazing and Range Developments

Past

After ore rich areas were depleted, ranching and agriculture remained important activities for people desiring to settle in the area. Railroad Valley, west of the project area, was first settled in 1867, and was known as Warm Springs Valley. White River Valley, east of the project area, was settled by Mormons. The White River Valley is a well-watered and fertile portion of White Pine County. Thus, it was attractive to ranchers and farmers. In contrast, Railroad Valley could not support farming, but it was a good stock-raising region, due to its springs, white sage, and sand grass. Ranching in Railroad Valley reflects much of what was going on across the state in the late 1800's and early 1900's as mining activity waned. Substantial livestock grazing occurred around the turn of the 19th century. Tremewan (1915) described the range conditions in the three or four years prior to 1909 as "having reached a point of almost total denudation." He also describes erosion and soil conditions that were affecting the summer range to the point that cattle were coming in from the summer range that were in such poor condition that they needed to be fed before they could be driven to shipping points.

Appendix H

Tremewan (1915) attributes these conditions to the transient sheep operations and their ability to move relatively quickly, with very little overhead, no taxes, and no commitment to the land or incentive to protect any part of the range. Homesteaders and ranchers, on the other hand were tied to the land and dependent on it to provide forage for their livestock and water for their crops (Tremewan 1915). This conflict in the years prior to 1909 eventually led to the establishment of the Forest Reserve in the White Pine and Grant-Quinn ranges.

Grazing allotments were created in 1909 with permits given to those with “established grazing preference.” At that time, there were applications for 560,000 sheep, 32,000 cattle, and 8,000 horses (Tremewan 1915). Not all the applications were accepted, thus reducing impacts on the land.

Present

Appendix C includes summaries of current grazing management by allotment. The summaries were developed by reviewing recent Annual Operating Instructions for these allotments. The summaries include information on number of livestock, forage utilization levels, monitoring, range improvements, and general management.

Current grazing operations in the project area rely on a number of range developments, such as water storage sites, fence, and stock facilities (corrals). Maps H-1 and H-2 display the location of these improvements in relation to the allotments. The developments will continue to be used and maintained under the action alternatives.

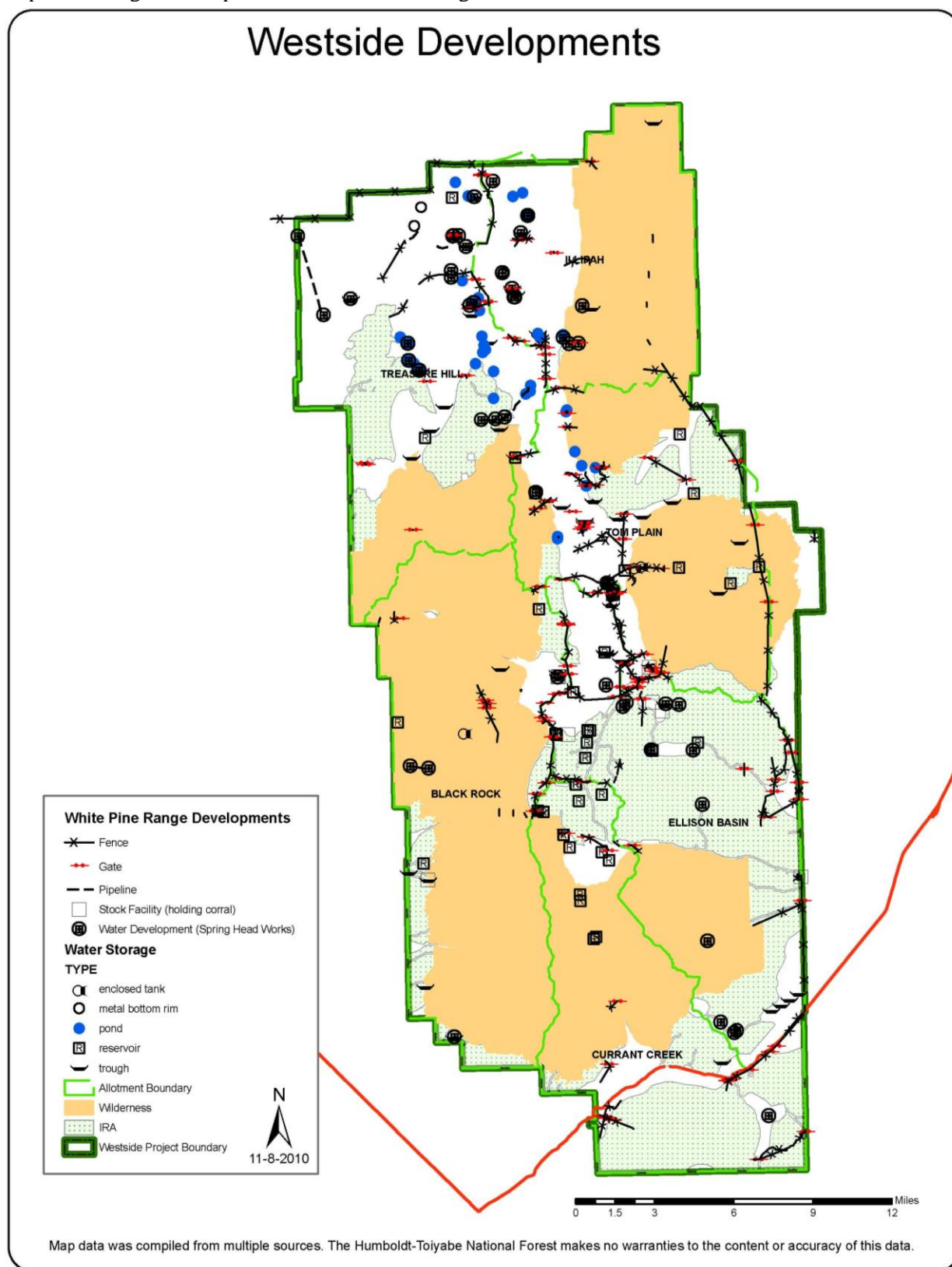
Table H-1. Summary of Existing Range Developments by Allotment.

ALLOTMENT	Water Storage	Fence (miles)	Stock Facilities	Gates	Spring Head Works	Pipeline (miles)
Big Creek	1	3.7	0	4	0	0
Blackrock	12	8.75	3	9	4	0.71
Cherry Creek	0	1.82	0	8	0	0
Currant	16	15.8	0	19	1	0
Ellison Basin	12	31.94	7	41	15	0
Hooper Canyon	0	0.33	0	3	0	0
Illipah	11	12.52	0	12	15	0
Irwin Canyon	0	0	0	0	0	0
Pine Creek/ Quinn Canyon	1	11.97	0	16	0	0
Tom Plain	31	42.08	1	59	3	0
Treasure Hill	28	15.34	0	16	19	6.97
Troy Mountain	5	5.66	0	0	6	5.46
Total	117	149.91	11	187	63	13.14

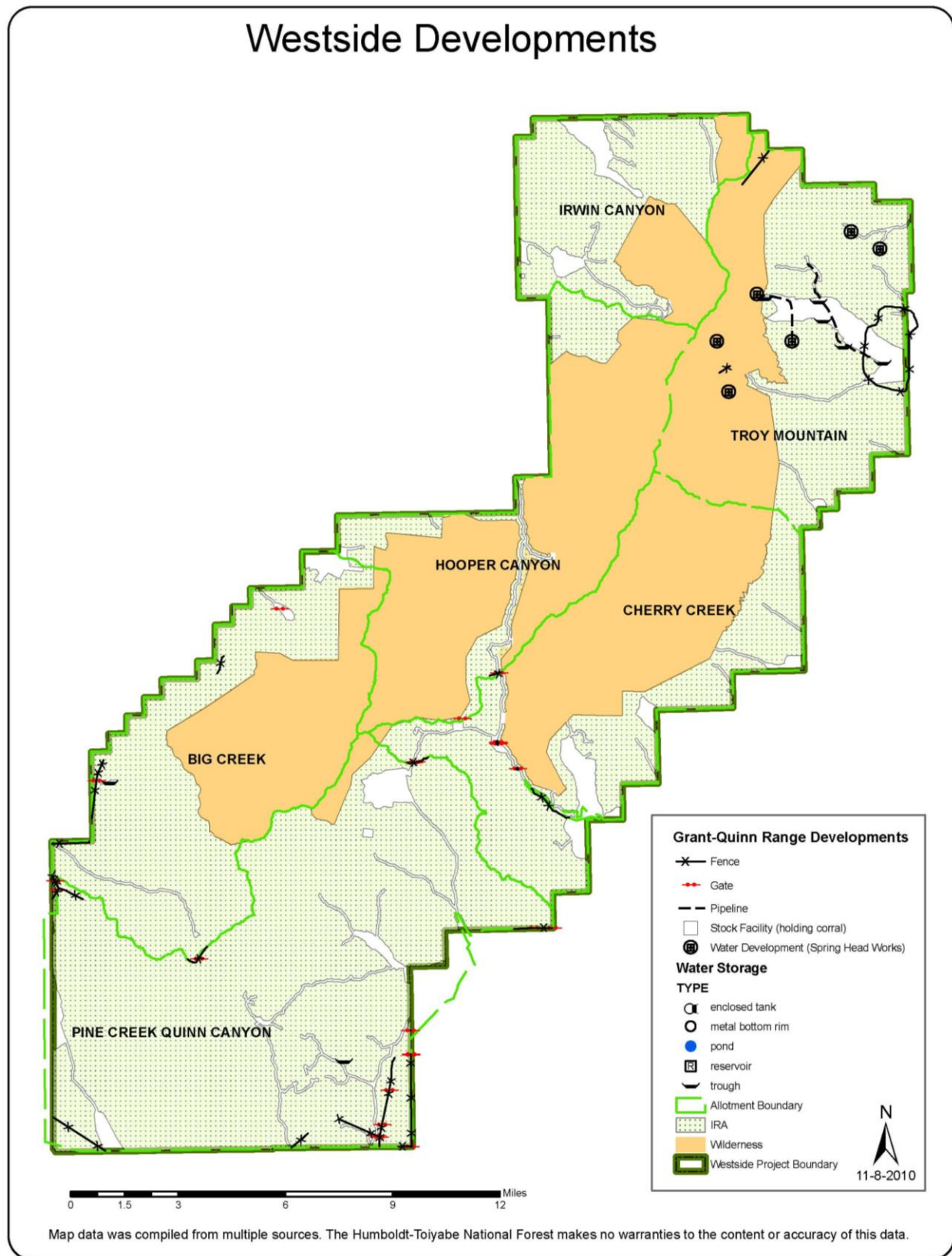
Foreseeable Future

At this time, there are no new range developments being considered for the project record.

Map H-1: Range Development on White Pine Range



Map H-2: Range Developments on Grant Quinn Range



Mineral Exploration

Past

The first ore discovery in the project area occurred in 1865, in the White Pine Mountain Range. The earliest production took place at Monte Cristo between 1865 and 1872. In 1868, the Hidden Treasure Mine on Treasure Hill was located. This discovery and several other rich discoveries in the vicinity led to one of the most sensational mining rushes in the West, the White Pine Rush of 1868-1869. The Troy Mining District was discovered in 1867 further west in Troy and Irwin Canyons on the west flank of the Grant Mountain Range in Railroad. There was an instant boom within a year of the discovery. The earliest production in the district took place between 1867 and 1876. Before the first grazing permits were issued, the discovery of silver and other valuable mineral sources was discovered near what is now known as the community of Hamilton (Davidson 1957). Mining remained the focus of that area until the early 1930s, when no new silver veins were discovered and production plummeted. While mining interests in the area continued through the 1980s, no significant deposits have been identified since the boom years of the 1800s.

During the mining boom era, mining exploration and mining in general had effects on water quality and quantity, riparian areas, and fish and wildlife species. Some of these effects include sediment inputs from mine tailing and waste rock dumps into the streams and rivers of the watershed. The fine sediments covered spawning gravels and, in some cases, altered the water chemistry. Rivers and streams were rechanneled, and vegetation in riparian areas declined due to increased human occupation. With few exceptions, the effects from these past activities have stabilized and are now virtually indistinguishable from the natural processes in the area. These areas are incredibly small and, other than their lack of vegetation, are not viewed as environmental concerns at this time.

Within this project area, these effects were generally restricted to the forestlands near Hamilton, Nevada. Mining elsewhere in the project area was at a small scale and the impacts from the activities were minimal and short term. Today, much of the evidence of mining outside the main mining districts consists of small adits or shafts, and human habitation sites.

Some logging also occurred in site-specific areas to produce mining timbers, building materials, and firewood. Where these limited activities occurred, trampling of vegetation, decreased stream shading, road building, and increased erosion and sediment delivery to the rivers resulted from these activities. The effects from the past logging operations have stabilized and are now indistinguishable from the natural processes in the area.

Present

There is some limited mineral exploration activity in the project area. The Mount Hamilton exploration project is located in the northwest corner of the White Pine Range. This project involves 13 core hole drill sites on existing and reclaimed roads. No road building or pad development is proposed, but 970 feet of reclaimed road would be reopened and 410 feet of reclaimed road would be traversed as cross-country travel. Sumps for drilling mud, 4 feet by 5 feet by 8 feet deep would be excavated in the road prism. After the drilling is completed, the sumps will be backfilled and reopened roads will be recontoured and seeded. The total area involved in the project, including use of the reclaimed roads, is less than 1 acre. Activity should begin in the fall of 2010 and end in the summer of 2011. The Green Springs – Cathedral Canyon exploration drilling project is located in the northwest corner of the White Pine Range. The project involves up to 14 drill sites. Most sites will be accessed from existing roads, but the project would also utilize overland travel (1/3 of a mile, total) and temporary roads (2/3 of a mile, total). The drilling activity will be conducted on 100 by 100 foot locations. The total area of disturbance will be less than 5 acres. Any topsoil present will be segregated during the drilling operations and then returned to the site and stabilized at the conclusion of the work. Activity should begin in the fall of 2010 and end in the summer of 2011.

Appendix H

Foreseeable Future

The Centennial Geotechnical Project proposes to conduct drilling for exploration and geotechnical work in the northwest corner of the White Pine Range. This project involves up to 22 drill holes, 2 for water monitoring wells and 20 for geotechnical information. The water monitoring wells would be located adjacent to existing road and utilize 60 feet by 20 feet drill pads that include 8 foot by 4 foot by 5 foot sumps. The 20 geotechnical drill sites would utilize 40 foot by 20 foot drill pads and should not require sumps. These sites would be accessed using 2,478 feet of reopened road, 462 feet of constructed road, and 9,050 feet of cross-country travel. The total surface disturbance, including cross-country travel, is estimated at 3.34 acres. After the drilling activities are completed, the drill sites and road would be recontoured and seeded. This proposal is being considered at this time and could begin within the next year. The duration of the project is expected to be one year.

Interest has been growing in the exploration and development of potential oil/gas and geothermal resources in the project area. There is potential for future oil and gas exploration in the project area adjacent to the Grant Range Wilderness, Quinn Canyon Wilderness, and Currant Mountain Wilderness areas. Applications have been filed with BLM for oil and gas leases. The potential geothermal resources are in the White Pine Range. At this time, no specific plans for exploration or development have been approved and no ground disturbing activity has been authorized.

While there are no mine reclamation projects currently scheduled for the area, there is a possibility that such a project might be identified and planned within the next 10 years. If or when such a project is identified, it would be designed to limit adverse environmental effects while improving watershed conditions.

Watershed Restoration

Past

There are a several historical watershed restoration projects in the White Pine Range. These projects were designed to have beneficial impacts to wildlife, vegetation, and water resources. As discussed below, these projects were successful and their beneficial effects have become stable at this time.

In 1978, a headcut repair was conducted on Cottonwood Creek to stabilize headcuts in several meadows along the creek. The goal of the project was to prevent the headcuts from progressing through their respective meadows. The project was successful in meeting that goal.

A 1999 project in Ellison Meadow was implemented to reduce soil loss to the gully that had developed near, and was contributing sediment to, Ellison Creek. The goal of the project was to halt the headcutting of a gully and prevent sediment from reaching Ellison Creek. The project was successful in meeting that goal.

In 2001, a project was implemented in Circle Wash to address a gully that had formed in the meadow. The goal of the project was to reduce erosion by reshaping the sides of the gully to stabilize them and permit vegetation to grow. The project involved sloping the banks of a gully that was approximately 60 feet long, 70 feet wide, and 10 feet deep.

Present

Copper Creek Headcut Restoration was implemented in September, 2010. This project is designed to raise the water table back to historic levels and stop the head cut from continuing up the meadow. It is expected to have beneficial impacts to wildlife, vegetation and water resources around and affected by Copper Creek. This project consists of repairing three headcuts and filling a few hundred feet of gullied stream

channel. It is located in two meadows on Copper Creek, 3 miles southwest of Ellison Guard Station and 30 miles southwest of Ely, Nevada.

Foreseeable Future

There are no watershed restoration projects planned in the foreseeable future.

Water Diversions

Past and Present

Agricultural water diversions have also been developed on some streams in the area and are found mostly on privately owned land or on lands administered by the Bureau of Land Management. The diversions depend on a reliable water supply from upstream sources on the Forest. Effects to the water source such as alterations in channel morphology leading to channel incision can cause changes to water retention along the riparian zone. This can amount to less water being available during low flow periods. The water that does flow beyond the points of diversion dissipates onto alluvial fans or stream bottoms.

A diversion on Currant Creek provides stock water and irrigation to RWD Currant Creek LLC. The diversion is very low on the Forest and consists of two holding ponds and diversion ditch. A diversion on Illipah Creek provides a water supply for the Moorman Ranch. In addition to providing stock water and irrigation, this diversion also provides a domestic water supply to the ranch. The diversion consists of a developed spring with head box and pipes that carry water to ranch.

Foreseeable Future

There are no water diversions planned in the foreseeable future.

Wildfire and Rehabilitation Following Wildfire

Past

From 1980 to 2007, there were 128 fires for a total of 53,342 acres within and adjacent to the project area. On average, there were 5 new fire starts a year. The fires ranged in size from 1 acre to 8,132 acres. Map H-3 that shows the location and number of acres burned of historical fires within and adjacent to the Ely Rangeland Westside allotment boundaries. The Troy Fire in 2004 is not displayed on the fire history map. It burned 2,800 acres in the higher elevations of the Irwin Canyon and Hooper Canyon Allotments.

The Ely Westside Rangeland project area has a history of fast moving wildfires on the lower elevations (5,200 to 7,200 feet) in the grass and sage brush communities that move into the pinyon-juniper communities. Fires that start above 7,200 feet on the Grant-Quinn Ranges and above 7,000 feet on the White Pine Range tend to have a more mosaic pattern and recover with native vegetation.

In 1997, the human-caused Troy Canyon Fire burned 808 acres near the old mining town of Troy. This fire burned in the lower elevations on the Irwin Canyon Allotment. In 1999, the Sellum Fire occurred on the east side of the Grant Range burning 10,000 acres in the lower elevations. In 2000, the Mammoth fire burned 600 acres that are now located in the Grant Wilderness, which was designated as a wilderness area in 2006. Both of these fires were located in the Troy Mountain Allotment. In 2004, the Troy wildfire burned a total of 2,800 acres in the higher elevations of the Irwin Canyon and Hooper Canyon Allotments. This fire was managed for resource benefits, including bighorn sheep habitat. In 2006, on the east side of the Grant Range, the Adaven and Sherwood fires burned a total of 8,234 acres in the Troy Mountain and Cherry Creek Allotments. The Troy Peak wildfire, also in 2006, burned 1,183 acres in the Hooper Canyon and Cherry Creek Allotments and was managed for resource benefits. In 2007, the Cathedral and Lampson wildfire burned 4,424 acres in the Treasure Hill Allotment on the White Pine Range. All of these fires, except the Adaven and 1997 Troy Canyon Fires were caused by lightning. There were four fires in the Pine Creek/Quinn Canyon Allotment between 1998 and 2005 that burned a

Appendix H

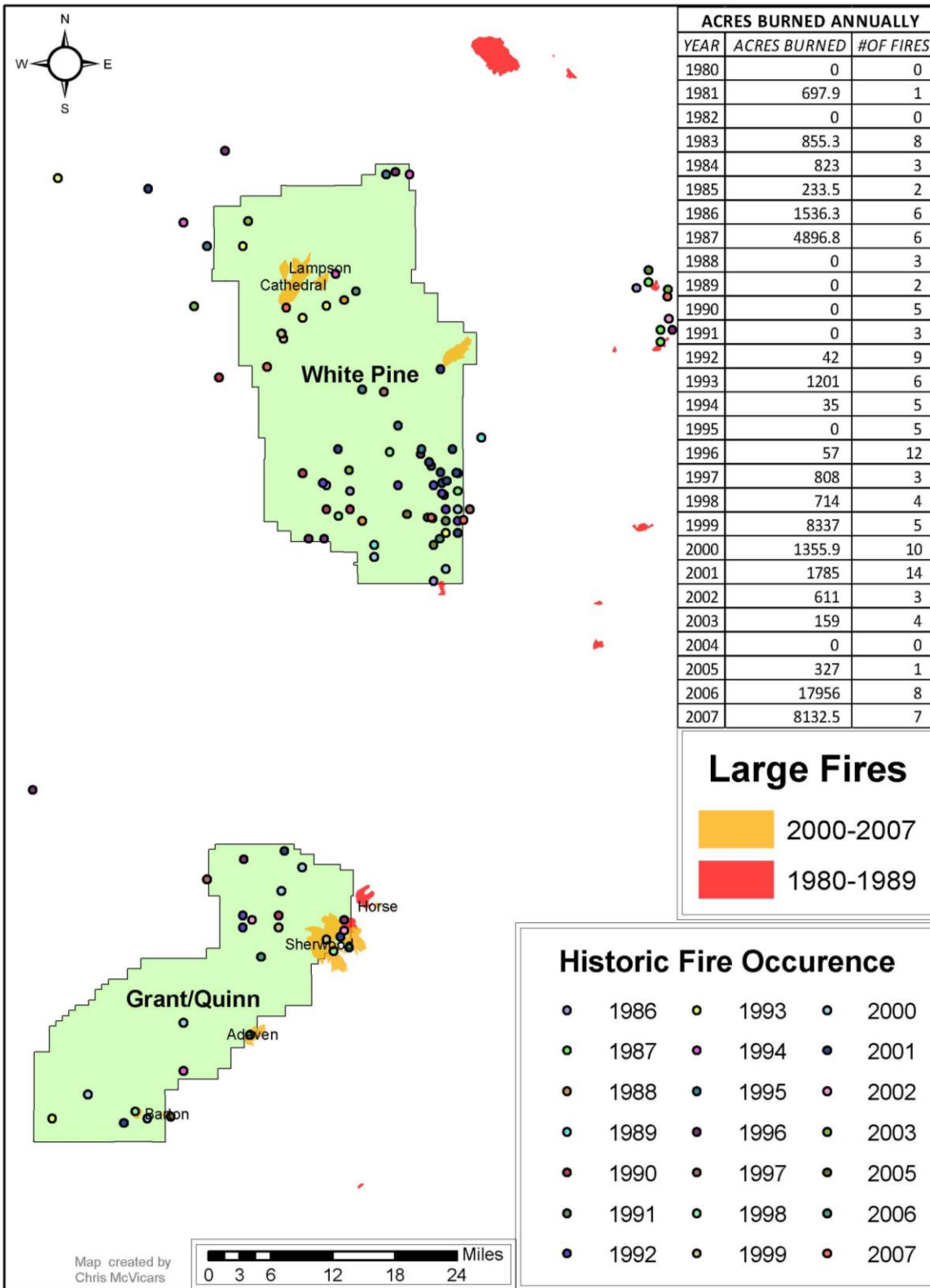
total of 2,073 acres. Three of these fires were in the Barton Creek area and the largest fire occurred near the southwest corner of the district boundary.

Rehabilitation actions usually consist of seeding native species, repairing fences, and aggressively treating noxious weeds to minimize infestations. Rehabilitation activities following wildfires have assisted in restoring perennial vegetation in burned areas. Two or more years of rest have allowed vegetation resources including riparian areas to recover following fires. Burn areas have been rested for a minimum of 2 years after the wildfire.

Rehabilitation actions have generally been limited following wildfires in the project area boundaries. In 1997, the Troy Canyon Fire occurred and was also seeded that same year. Following the Cathedral Fire in 2007, rehabilitation actions included seeding, mulching, and seeding with mulch within the 3,847 acre fire site. In 2006 and 2007, the Adaven and Sherwood Fires, which are located both on Forest Service and BLM lands, were seeded. The Forest Service hand seeded 160 acres and BLM drill seeded 275 acres on the Adaven Fire. The Forest Service aerial seeded 1,405 acres and BLM drill seeded 1,758 acres and aerial seeded 200 acres on the Sherwood Fire. After the Mammoth Fire and the South Fork Fire in 2000, both of the burned areas were seeded later that same year.

Map H-3: Fire History

White Pine & Grant/Quinn Fire History



Appendix H

Present

Based on historical patterns and current conditions the following allotments are at highest risk related to large-scale wildfires:

- Irwin Canyon- due to cheat grass in the lower elevations.
- Hooper Canyon- due to cheat grass in the lower elevations.
- Troy Mountain-due to cheat grass and other grass species in the lower elevations.
- Cherry Creek-due to cheat grass and other grass species in the lower elevations.
- Ellison Basin-due to higher number of fire starts and increase of recreation users.
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These allotments have historically had larger fires in the lower elevations. In the higher elevations, the vegetation in these allotments is in better condition so fires in these areas would tend to have a moderate to low risk of large scale, high severity wildfires.

The following allotments are at low to moderate risk for large-scale, high severity wildfires due to the vegetation communities, topography and low historic fire occurrence:

- Tom Plain
- Illipah
- Treasure Hill
- Black Rock
- Currant Creek
- Big Creek
- Pine Creek-Quinn Canyon.

Foreseeable Future

Wildfires will likely continue to impact resources within the project area. The locations and timing of potential wildfires in the future cannot be predicted and are therefore not foreseeable.

Prescribed Fire/Vegetation Treatments

Past

Until the mid 1970's, the main vegetation treatment was chaining and seeding, with some prescribed burning throughout the project area. In 1974, research was started in the Horse track Springs area to observe the response of vegetation to prescribed burning. In 1975, five sites were treated for a total of 104 acres. Over the past 20 years, vegetation treatments have included prescribed fires, mechanical treatments; seedings have been limited.

Present

In 2007, the Currant Prescribed Burn project was implemented. This project approved up to 3,700 acres of treatment in pinyon-juniper community to create a diversity of age classes and structures to reduce the risk of large wildfires. The majority of the project area has been completed, but there are approximately 300-500 acres remaining to treat. This project is within the Currant Creek Allotment.

Two aspen stands were protected with a fence in 2007. The fence was constructed to protect 13 acres of aspen from grazing by livestock and big game in the Illipah Allotment.

In 2009, the Currant Triangle pinyon-juniper cutting project was implemented in the Currant Creek Allotment. The objective of this project was to cut and leave approximately 300 acres of pinyon-juniper that were expanding into an old chaining/seeding area. The White River and Ellison mowing and seeding project was also implemented in 2009 in the Ellison Basin Allotment. This project involved mowing and seeding approximately 200 acres of mountain and basin big sage brush communities to improve the sagebrush habitats for sage grouse, mule deer and elk.

In 2010, the White Pine Sagebrush Restoration project commenced. This project involves cutting and leaving or removing pinyon-juniper on up to 5,000 acres within the 19,000 acre project area, which includes portions of the Ellison Basin and Currant Creek Allotments. Approximately 2,000 acres are to be treated in 2010. Also in 2010, the Central White Pine Pinyon-Juniper removal project is set to begin in the Illipah, Tom Plain, Ellison Basin and Currant Creek Allotments. This project involves cutting and leaving the small trees on up to 12,000 acres. Approximately 2,000 acres of treatment have been completed at this time. Ely Bureau of Land Management mowed 1,000 acres in 2010 east of Cherry Creek drainage, which is adjacent to the Cherry Creek Allotment boundary. These projects were designed to improve the overall health of the sagebrush communities that are utilized by sage grouse, mule deer, and elk.

The vegetation treatments identified above may have short-term adverse effects on the quality of wildlife habitat, composition of vegetative communities, and a short-term increase to bare ground. These adverse impacts generally only last for 2-3 years or less. Over the long term, these projects should result in an improvement to the quality of wildlife habitat, diversity in vegetation communities (which increases age classes). These projects should also reduce the amount of bare ground, the potential for soil erosion, and the severity of unplanned fires.

Foreseeable Future

Vegetation treatments, which include prescribed fire, mechanical treatments (mastication, mowing, chipping, whole tree removal, cut/leave and fire wood removal), will continue to occur in the Ely Westside Rangeland project area. For the next 3-5 years, there are several projects scheduled. The White Pine Sagebrush Restoration project area involves approximately 1,000 acres to address pinyon-juniper expansion in that area. The majority of these acres will receive a variety of mechanical treatments and some areas will be jackpot burned. The Central White Pine Pinyon-Juniper Removal project involves approximately 6,000 to 10,000 acres to address pinyon-juniper expansion. Trees would be cut and left on site. Also, in this project area, we will be treating the cheat grass with herbicide along the road edges and fencing out 5 springs. Another potential project proposes approximately 4,000 acres of prescribed burning near Adaven on the Grant-Quinn Range to reduce the risk of fire to private inholdings in the area.

A fence to protect an aspen stand is scheduled to be installed in the Illipah Allotment in the fall of 2011. That fence would protect 3 acres of aspen from livestock grazing, but be designed to allow access by big game. In 2012, the District plans to construct three fences designed to protect approximately 10 acres of sage grouse habitat. One of the fences would protect 3 acres along Copper Creek in the Ellison Basin Allotment. Another fence would protect 4 acres of a meadow in the Tom Plain Allotment. The final fence would protect 3 acres of a meadow in the Illipah Allotment.

The Ely BLM office plans to mow 1,000 acres and seed approximately 2,000 acres of sagebrush in the Jakes Valley, east of Midway Well and Willow Grove which is east of Tom Plain and Ellison Basin allotments. The long-term goals of this project are to reduce shrub cover, improve habitat for sage grouse and other wildlife, reduce fuel loading, and restore the historic disturbance regime.

Spraying and inventory of invasive and noxious weeds will continue and/or increase within the project area for the next 2-3 years.

Estray Livestock

Past and Present

There are approximately 80-100 head of cattle located on the Grant-Quinn Range that are considered estray. Estray livestock have the potential to cause the same effects to the environment as permitted livestock, but to a greater degree because they are unregulated and remain in the area year round. The

Appendix H

District has taken steps to reduce the number of stray livestock, but until they are completely removed, they have the potential to adversely affect resources.

Foreseeable Future

No management actions are anticipated due to budgetary and political constraints. Without intervention, the herd will continue to breed and increase in size. The area the herd uses will likely increase to correspond with the size of the herd.

Wild Horses

Past and Present

The project area contains three Wild Horse Territories/Horse Management Areas (WHT/HMAs) that overlap Bureau of Land Management (BLM) and Forest Service administered lands. These territories take in portions of the Big Creek, Blackrock, Hooper Canyon, Illipah, Irwin Canyon, Pine Creek/ Quinn Canyon, Tom Plain, and Treasure Hill grazing allotments.

The Monte Cristo WHT and Jakes Wash HMA are located across the northern half of the White Pine Range. In 1986, a Territory Management Plan established an Appropriate Management Level (AML) of 72-120 wild horses for the Forest administered portion of Monte Cristo WHT. In 2006, a gather was completed across the Monte Cristo Complex and 867 horses were removed. When the last census was completed in 2008, 257 wild horses were observed within the territory and 15 wild horses outside of the territory.

The Quinn WHT is located on the southwestern end of the Grant-Quinn Range. The established AML set a range of 12-15 wild horses. The last census was completed in 1997, no wild horses were observed within or outside the territory. Wild horses have not been observed on the Quinn WHT in several years.

Wild horses are considered a part of the landscape, generally in the same manner as wildlife. Wild horses have the potential to affect resources in the same manner as permitted livestock. Many upland and riparian sites are grazed by wild horses after permitted livestock are removed. These sites experience no rest from grazing, thus promoting undesirable species composition, increase of bare ground, and reduction of recovery time for many riparian systems. Wild horse gathers conducted with the BLM are expected to move populations toward the established AMLs. It is anticipated that the population reductions will enhance the range condition by allowing increased ground cover and diversity of the recovering plant community. Gathers are generally conducted on a 5 year rotating schedule.

Foreseeable Future

Continued gathers conducted with the BLM are expected to move populations toward the established AMLs. The next proposed gather for the Monte Cristo WHT is during winter 2011/2012.

Roads, Trails, Vehicle Uses

Past

Historically, roads on the Ely Ranger District developed because of mining activities, recreation, hunting, livestock management, fire suppression activities, and for land management. In the past, roads were lightly used with minimal recreational use. In more recent years, recreational use has increased including the use of off-highway vehicles (OHVs). Although use has increased, it has generally been light compared to other Forest Service ranger districts.

There were approximately 40 miles of recreational trails within the project area. These trails were originally developed for forest management and livestock allotment management. Recreational use of trails was generally light historically. In more recent years, the recreational use remains light; however, the management focus of these trails is primarily for recreational use. The district's trails are primarily located the Quinn Canyon and Currant Mountain Wilderness Area.

Present

On February 9, 2009, Ely District Ranger Jose Noriega signed a Decision Notice and Finding of No Significant Impact (FONSI) approving the Ely Travel Management Project. This decision designated 1,039 miles of motorized roads and trails and 199 miles of non-motorized trails. It also restricted off road travel. A formal travel map has been printed and is available at the Ely Ranger District office in Ely, Nevada.

There are currently no plans to construct additional recreational trails within the cumulative effects area. Management activities associated with the current trail system are limited to minimal trail maintenance about one out of every three years.

The approval and implementation of the Ely Travel Management Plan will reduce impacts on vegetative communities associated with unrestricted off-road travel. There will also be a reduction in soil erosion (bare ground, sediment/turbidity). Impacts associated with disturbance to wildlife species will also decline as unrestricted off road travel is eliminated and unauthorized roads are closed. Impacts to cultural resources will be monitored through 2013.

Foreseeable Future

The only foreseeable road construction within the cumulative effects area would be temporary roads associated with mineral exploration activities. There are no additional plans for the construction of any roads or motorized trails at this time.

Planning is currently ongoing related to implementation and enforcement of the Travel Management decision. These actions will include public education, signing of open roads and trails, rehabilitation of closed or unauthorized roads, and enforcement activities.

Roads not maintained by Lincoln, Nye, or White Pine Counties would continue to be maintained by the USFS.

Recreation

Past and Present

Recreation activities, such as camping, hiking, and hunting have not historically been a major factor in the condition of resources across the Project Area. There are a number of dispersed camping sites within the project area (Currant Creek, White River, and Cherry Creek). Dispersed camping also occurs in meadow complexes, cottonwood galleries, and along side roads. Recreational activities can cause soil compaction (which can increase bare ground, increase water temperature, reduce quality of wildlife habitat, changes vegetation species composition, reduce number of saplings and suckers), increase erosion and run off (which can increase turbidity/sediment), conversion of vegetation communities, spread of noxious weeds, and loss of large woody debris from firewood collection. This disturbance is most obvious in the major drainages where dispersed campsites are located adjacent to rivers and streams within the riparian area. Maintenance of existing campsites and concentrated use areas is expected to continue similar to existing conditions.

Foreseeable Future

No new developed recreation facilities are planned in the project area over the next 10 years. In the future, dispersed recreational uses such as hiking, camping, horseback riding, ATV/OHV use, and other various

minor uses are expected to increase slightly over current levels. Hunting use is expected to remain at stable levels into the future.

Forest Products

Past and Present

The Ely Ranger District has historically allowed and continues to allow the harvesting of fuelwood in the project area. Fuelwood permits allow only cutting of dead and down pinyon, juniper, aspen and white fir.

Dead mountain mahogany may only be cut from August 1 to December 31. Firewood gathering is also used for campfires within this project area. This use is considered minimal with only limited impacts. Post and pole and Christmas tree permits are also issued for this area.

The Ely Westside Rangeland project area has 3 designated areas for commercial harvesting of pine nuts that fall within the Cherry Creek, Pine Creek-Quinn Canyon, Big Creek, Treasure Hill, White River, Currant Creek, Ellison Basin and Tom Plain allotments. Commercial harvesting of pine nuts produces approximately 10 tons of products. On average, 2 of the designated areas are sold each year. There is also authorized personal use of pine nut gathering throughout the district outside of wilderness areas.

Foreseeable Future

Fuelwood harvesting levels are expected to increase due to opening up areas to green fuelwood gathering. Rather than limit cutting to dead and down trees, green fuelwood permits would also allow the cutting of live pinyon and juniper. The Christmas tree and post-pole permits are expected to remain relatively stable into the future.

Commercial and personal pine nut harvesting levels are expected to remain relatively stable into the future.

Bureau of Land Management

Past and Present

The BLM's Ely District prepared a new *Ely District Resource Management Plan* in 2008, which replaced the previous plan from 1987. Similar to the USFS, BLM active management of lands includes maintenance of campgrounds and monitoring of grazing and mining leases. No new grazing or mining leases are planned; however, new mineral exploration activities and possible mineral withdrawals could occur over the next 10 years, dependent on mineral values. It is expected that the new Ely Resource Management Plan will contain similar standards and guidelines that incorporate BMP standards and guidelines. Thus, activities expected to occur on BLM lands are similar to those expected to occur on USFS lands

The Southwest Intertie Project (SWIP) power transmission line is presently being built along the eastern side of the White Pine Range. SWIP is a 500 kV alternating current overland transmission line. SWIP is over 500 miles long and connects the Midpoint Substation in Jerome County, Idaho with the Thirtymile Substation in White Pine County, Nevada and then extend to the Las Vegas area. The transmission line will pass near two leks on BLM within the cumulative effects analysis area. The BLM has required timing limitations to help mitigate disturbance to birds during the breeding season and a design feature to help reduce the use power lines as perches.

Restoration treatments:

- Batterman Wash Sagebrush Project:
 - 708 acres of sagebrush crushing and seeding between Sand Creek and Pine Creek (south of Cherry Creek), along the bench. Wyoming big sagebrush habitat was treated.
 - Completed in the spring of 2006.
- Worthington Mountain Sagebrush Mowing:
 - Located on the east side of the Worthington Mountains approximately 14 miles southeast of the Batterman Wash Sagebrush Project.
 - 1,000 acres of Wyoming big sagebrush were mowed. The area was not seeded.
 - Completed in the spring of 2008.
- Adaven Wildfire
 - Drill seeded 275 acres of the Adaven Wildfire, just north of the entrance to Cherry Creek Canyon.
 - Completed in winter of 2006.
- Sherwood Wildfire
 - Drill seeded 1,758 acres and aerial seeded 200 acres of the Sherwood Wildfire, between Scofield and Rimrock Canyon.
 - Completed in winter of 2006-2007.

Foreseeable Future

Restoration Treatments:

- Batterman Wash Sagebrush Mowing
 - Plan to mow 1,000 acres of Wyoming big sagebrush beginning July 2010, approximately four miles east of the mouth of Cherry Creek Canyon. The project will be completed by September or earlier, 2010.
 - The goal of the project is to reduce decadent sagebrush cover, and improve overall vegetative composition including the growth of forbs, perennial grasses and health of shrubs.
- Jakes Wash Sagebrush Mowing
 - Plan to mow and seed approximately 2,000 acres of sagebrush in Jakes Valley, east of Midway Well and Willow Grove. Should be completed in late 2011.
 - Reduce decadent shrub cover on sagebrush ecological sites to allow for appropriate and vigorous shrub and herbaceous (grass & forb) plant communities 2. Improve available habitat for sage grouse and other wildlife species.3. Reduce fuel loading and continuity.4. Restore the historic disturbance regime within the project area.